

Ball and Roller Bearing Manufacturing: 2002

Issued January 2005

EC02-311-332991 (RV)

2002 Economic Census

Manufacturing

Industry Series



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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)					
332991, Ball and roller bearing manufacturing	2002..	121	193	28 956	1 194 921	23 884	47 383	902 822	3 524 012	2 178 210	5 735 846	'210 675
	2001..	N	N	32 222	1 332 692	26 290	53 298	986 401	3 007 605	2 111 269	5 186 089	270 072
	2000..	N	N	35 727	1 459 948	29 222	58 557	1 089 824	3 390 832	2 570 401	6 048 302	288 349
	1999..	N	N	35 964	1 427 753	29 441	60 337	1 071 778	3 600 290	2 489 701	6 082 524	295 149
	1998..	N	N	36 948	1 402 650	30 299	63 380	1 053 824	3 849 296	2 388 387	6 157 867	330 986
	1997..	116	184	36 547	1 368 804	29 827	63 026	1 033 718	3 742 916	2 363 496	6 093 840	309 041

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
332991, Ball and roller bearing manufacturing												
United States	—	193	127	28 956	1 194 921	23 884	47 383	902 822	3 524 012	2 178 210	5 735 846	'210 675
California	4	14	4	746	28 939	592	1 169	20 359	77 980	26 250	104 077	'2 791
Connecticut	5	15	8	1 356	62 199	1 026	2 171	41 082	142 351	60 209	205 425	'4 339
Georgia	1	10	7	1 843	67 564	1 590	3 172	52 689	219 908	120 000	337 611	'19 127
Illinois	—	16	12	1 977	81 857	1 632	3 156	64 065	227 627	157 806	386 857	'28 534
Indiana	1	10	8	1 912	76 534	1 510	2 897	53 010	198 770	72 995	273 344	'7 472
Kentucky	—	8	5	531	19 425	440	830	15 661	115 757	53 214	169 666	'3 525
Michigan	—	8	5	613	32 019	475	1 020	19 870	38 721	89 226	138 577	'2 590
New Jersey	9	5	3	426	17 064	303	596	10 464	42 101	15 110	57 933	'1 196
New York	4	15	6	1 274	58 612	925	1 859	29 021	102 280	57 195	166 395	'6 657
North Carolina	—	11	11	1 892	81 342	1 610	3 343	68 651	280 294	211 516	486 459	'23 852
Ohio	—	12	12	4 306	211 909	3 652	7 638	174 787	704 861	426 042	1 136 407	'42 383
Oklahoma	2	4	1	152	5 913	122	182	4 474	4 861	17 436	23 044	'733
Pennsylvania	—	9	9	1 134	46 388	907	1 711	32 805	182 585	82 461	267 590	'5 877
South Carolina	—	13	12	5 684	207 698	4 906	9 097	166 527	575 010	412 686	985 480	'30 124
Tennessee	—	8	7	1 400	52 702	1 206	2 390	41 414	185 061	89 955	278 577	'6 194

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
332991, Ball and roller bearing manufacturing	
Companies ¹	number.. 121
All establishments ²	number.. 193
Establishments with 1 to 19 employees	number.. 66
Establishments with 20 to 99 employees	number.. 50
Establishments with 100 employees or more	number.. 77
All employees ³	number.. 28 956
Total compensation	\$1,000.. 1 639 925
Annual payroll	\$1,000.. 1 194 921
Total fringe benefits	\$1,000.. 445 004
Production workers, average for year	number.. 23 884
Production workers on March 12	number.. 24 191
Production workers on May 12	number.. 23 931
Production workers on August 12	number.. 23 845
Production workers on November 12	number.. 23 540
Production worker hours	\$1,000.. 47 383
Production worker wages	\$1,000.. 902 822
Total cost of materials	\$1,000.. 2 178 210
Materials, parts, containers, packaging, etc., used	\$1,000.. 1 961 385
Resales	\$1,000.. 29 603
Purchased fuels	\$1,000.. 28 662
Purchased electricity	\$1,000.. 90 742
Contract work	\$1,000.. 67 818
Quantity of electricity purchased for heat and power	1,000 kWh.. 1 801 802
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 5 735 846
Primary products value of shipments	\$1,000.. 5 506 992
Secondary products value of shipments	\$1,000.. 155 962
Total miscellaneous receipts	\$1,000.. 72 892
Value of resales	\$1,000.. 37 257
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 97
Value of primary products shipments made in all industries	\$1,000.. 5 567 253
Value of primary products shipments made in this industry	\$1,000.. 5 506 992
Value of primary products shipments made in other industries	\$1,000.. 60 261
Coverage ratio	percent.. 99
Value added	\$1,000.. 3 524 012
Total inventories, beginning of year	\$1,000.. 839 779
Finished goods inventories	\$1,000.. 316 375
Work-in-process inventories	\$1,000.. 268 496
Materials and supplies inventories	\$1,000.. 254 908
Total inventories, end of year	\$1,000.. 793 269
Finished goods inventories	\$1,000.. 292 555
Work-in-process inventories	\$1,000.. 258 692
Materials and supplies inventories	\$1,000.. 242 022
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. '4 346 331
Total capital expenditures (new and used)	\$1,000.. '210 675
Buildings and other structures (new and used)	\$1,000.. '10 872
Machinery and equipment (new and used)	\$1,000.. '199 803
Automobiles, trucks, etc., for highway use	\$1,000.. '1 413
Computers and peripheral data processing equipment	\$1,000.. '7 195
All other expenditures for machinery and equipment	\$1,000.. '191 195
Total retirements	\$1,000.. '165 507
Gross value of depreciable assets at end of year	\$1,000.. '4 391 499
Depreciation charges during year	\$1,000.. '212 536
Total rental payments	\$1,000.. 25 587
Buildings and other structures	\$1,000.. 9 023
Machinery and equipment	\$1,000.. 16 564
Total other expenses ⁴	\$1,000.. 451 812
Response coverage ratio ⁵	percent.. 88
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 127 798
Communications services ⁴	\$1,000.. 5 845
Legal services ⁴	\$1,000.. 3 109
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 2 436
Advertising and promotional services ⁴	\$1,000.. 1 999
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 13 494
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 7 716
Management consulting and administrative services ⁴	\$1,000.. 17 939
Taxes and license fees ⁴	\$1,000.. 20 164
All other expenses ⁴	\$1,000.. 251 310

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on 2002 Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
332991, Ball and roller bearing manufacturing											
All establishments	—	193	28 956	1 194 921	23 884	47 383	902 822	3 524 012	2 178 210	5 735 846	'210 675
Establishments with—											
1 to 4 employees	7	32	76	2 721	61	109	2 000	7 585	4 936	12 099	'235
5 to 9 employees	8	17	116	4 868	96	195	3 884	12 102	6 940	18 684	'343
10 to 19 employees	4	17	238	9 008	182	378	6 370	25 728	14 828	41 468	'1 244
20 to 49 employees	1	26	843	32 914	638	1 301	21 376	83 081	88 155	168 467	'2 478
50 to 99 employees	1	24	1 841	68 225	1 396	2 885	46 682	202 774	126 610	332 939	'13 648
100 to 249 employees	2	36	5 740	235 836	4 604	9 192	176 406	743 794	387 161	1 155 365	'38 293
250 to 499 employees	—	26	8 499	330 365	7 176	13 887	253 412	958 108	659 799	1 629 546	'70 350
500 to 999 employees	—	12	7 617	323 194	6 205	12 337	235 148	1 005 542	498 709	1 495 440	'44 986
1,000 to 2,499 employees	—	3	3 986	187 790	3 526	7 099	157 544	485 298	391 072	881 838	39 098
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	48	218	8 408	182	353	6 622	21 514	11 045	32 559	'682

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
332991	Ball and roller bearing manufacturing..	193	28 956	1 194 921	23 884	47 383	902 822	3 524 012	2 178 210	5 735 846	'210 675
3329911	Ball bearings, complete, unmounted	56	11 456	480 941	9 119	18 402	342 523	1 200 345	925 370	2 144 467	'92 974
3329913	Tapered roller bearings (including cups and cones), unmounted	18	5 989	276 454	5 157	10 517	226 412	906 130	569 272	1 475 654	'50 019
3329915	Other roller bearings, unmounted	23	6 219	226 442	5 376	10 134	178 110	747 359	359 149	1 112 461	'41 756
3329917	Mounted bearings (except plain)	10	2 180	87 391	1 762	3 265	67 341	355 171	122 051	482 534	'10 256
3329919	Parts and components for ball and roller bearings (including balls and rollers), sold separately (excluding cups and cones)	25	2 636	104 485	2 084	4 293	73 708	266 617	179 798	451 675	'13 843

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332991	Ball and roller bearing manufacturing	2002.. N 1997.. N	X X	X X	5 567 253 5 934 983
3329911	Ball bearings, complete, unmounted	2002.. N 1997.. N	X X	X X	1 920 120 2 107 110
33299111	Ball bearings, complete, unmounted	2002.. N 1997.. N	X X	X X	1 920 120 2 107 110
3329911100	Ball bearings, complete, unmounted ¹	2002.. 47 1997.. 51	X X	X X	1 920 120 2 107 110
3329913	Tapered roller bearings (including cups and cones), unmounted	2002.. N 1997.. N	X X	X X	1 465 005 1 470 822
33299131	Tapered roller bearings (including cups and cones), unmounted	2002.. N 1997.. N	X X	X X	1 465 005 1 470 822
3329913100	Tapered roller bearings (including cups and cones), unmounted ¹	2002.. 16 1997.. 14	X X	X X	1 465 005 1 470 822
3329915	Other roller bearings, unmounted	2002.. N 1997.. N	X X	X X	1 042 773 1 171 970
33299151	Other roller bearings, unmounted	2002.. N 1997.. N	X X	X X	1 042 773 1 171 970
3329915100	Other roller bearings, unmounted ¹	2002.. 22 1997.. 24	X X	X X	1 042 773 1 171 970
3329917	Mounted bearings (except plain)	2002.. N 1997.. N	X X	X X	458 422 475 039
33299171	Mounted bearings (except plain)	2002.. N 1997.. N	X X	X X	458 422 475 039
3329917100	Mounted bearings (except plain) ¹	2002.. 15 1997.. 17	X X	X X	458 422 475 039
3329919	Parts and components for ball and roller bearings (including balls and rollers), sold separately (excluding cups and cones)	2002.. N 1997.. N	X X	X X	624 222 648 035
33299191	Parts and components for ball and roller bearings (including balls and rollers), sold separately (excluding cups and cones)	2002.. N 1997.. N	X X	X X	624 222 648 035
3329919100	Parts and components for ball and roller bearings (including balls and rollers), sold separately (excluding cups and cones) ¹	2002.. 33 1997.. 35	X X	X X	624 222 648 035
332991W	Ball and roller bearing manufacturing, nsk, total	2002.. N 1997.. N	X X	X X	56 711 62 007
332991WY	Ball and roller bearing manufacturing, nsk, total	2002.. N 1997.. N	X X	X X	56 711 62 007
332991WYWW	Ball and roller bearing manufacturing, nsk, for nonadministrative-record establishments	2002.. N 1997.. N	X X	X X	25 739 24 243
332991WYWY	Ball and roller bearing manufacturing, nsk, for administrative-record establishments	2002.. N 1997.. N	X X	X X	30 972 37 764

¹For additional detail, see Current Industrial Report MA332Q, Antifriction Bearings.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3329911	Ball bearings, complete, unmounted	
	United States..... 2002..	1 920 120
	..... 1997..	2 107 110
	Connecticut..... 2002..	97 489
	..... 1997..	108 520
	Illinois..... 2002..	155 303
	..... 1997..	197 256
	Kentucky..... 2002..	94 076
	..... 1997..	97 961
	Michigan..... 2002..	121 599
	..... 1997..	N
	New York..... 2002..	110 101
	..... 1997..	183 852
3329913	Tapered roller bearings (including cups and cones), unmounted	
	United States..... 2002..	1 465 005
	..... 1997..	1 470 822
3329915	Other roller bearings, unmounted	
	United States..... 2002..	1 042 773
	..... 1997..	1 171 970
3329917	Mounted bearings (except plain)	
	United States..... 2002..	458 422
	..... 1997..	475 039
3329919	Parts and components for ball and roller bearings (including balls and rollers), sold separately (excluding cups and cones)	
	United States..... 2002..	624 222
	..... 1997..	648 035
	Connecticut..... 2002..	78 681
	..... 1997..	73 165
	Illinois..... 2002..	59 111
	..... 1997..	33 827
	Pennsylvania..... 2002..	19 599
	..... 1997..	N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
332991	Ball and roller bearing manufacturing		
00900001	Total materials .....2002..	X	1 961 385
	.....1997..	X	2 108 792
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....2002..	X	28 311
	.....1997..	X	18 477
33200095	Other fabricated metal products (excluding castings and forgings) .....2002..	X	35 964
	.....1997..	X	4 630
33211103	Cold iron and steel forgings .....2002..	X	86 749
	.....1997..	X	25 677
33211111	Other iron and steel forgings .....2002..	X	145 104
	.....1997..	X	239 026
33151001	Iron and steel castings (rough and semifinished) .....2002..	X	79 872
	.....1997..	X	42 399
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) .....2002..	X	757
	.....1997..	X	3 149
33120007	Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products) .....2002..	X	164 674
	.....1997..	X	186 836
33120016	Steel sheet and strip (including tinplate) .....2002..	X	75 455
	.....1997..	X	N
33120033	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	150 276
	.....1997..	X	190 096
331000AJ	Nonferrous metal shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	4 490
	.....1997..	X	N
33299101	Ball and roller bearings (mounted or unmounted) .....2002..	X	D
	.....1997..	X	N
33299107	Balls, rollers, cages, collars, races, and other antifriction bearing components and parts .....2002..	X	551 641
	.....1997..	X	601 417
33361305	Clutches, couplings, shafts, sprockets, and other mechanical power transmission equipment .....2002..	X	3 495
	.....1997..	X	2 761
33531207	Electric motors, generators, and parts .....2002..	X	13 317
	.....1997..	X	15 085
32221001	Paperboard containers, boxes, and corrugated paperboard .....2002..	X	12 438
	.....1997..	X	19 834
32791001	Grinding wheels and other abrasive products, excluding industrial diamonds .....2002..	X	32 453
	.....1997..	X	38 049
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) .....2002..	X	16 063
	.....1997..	X	4 093
33510000	Special dies, tools, die sets, jigs, and fixtures (excluding cutting tools for machine tools) .....2002..	X	D
	.....1997..	X	37 681
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	354 343
	.....1997..	X	609 036
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	98 468
	.....1997..	X	70 546

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.